Wednesday, June 13, 2007—Presentations & Birds of a Feather

10:00-10:45 AM **Fiesta Rooms 1 & 2**

A Virtual Visitor Network Authentication System

Arthur Nichols, Los Alamos National Laboratory

Bio

Arthur Nichols has been working at LANL in the Telecommunications group for over two years. He holds a BS degree in Computer Science; he is a Certified Information Systems Security Professional (CISSP) and a Project Management Professional (PMP). He also holds certifications for Penetration Testing, Computer Forensics, and NSA InfoSec Risk Methodology. Prior to joining LANL Art, was a Solution Architect and Senior Security Specialist at the Intel Corporation.

Abstract

Virtual machine (VM) Technology is increasing due to better system manageability and resource utilization. With the advent of VMware's ESX 3.0.1 server and VMware's inherited security of Partitioning, Isolation, and Encapsulation, virtual machines can be just as secure and achieve near native performance as the physical system. We at the Los Alamos National Laboratory have implemented a virtual visitor network authentication system with VMware's ESX 3.0.1 product. This presentation describes the system and the process used to evaluate the individual components in order for the authentication system to be considered as a secure, viable Visitor Network Authentication System.

10:00-10:45 AM **Fiesta Rooms 3 & 4**

The Pros and Cons in Using Symantec Sygate Enterprise Protection Agent to Block Ports and Devices on Networked and Standalone Windows Workstations

Rose Anne Leyba, Los Alamos National Laboratories

Bio

Rose Anne Leyba has been working at LANL for eight years. She has a BS in Computer Science and is currently a member of the Los Alamos Personal Firewall team. She has developed and implemented the Microsoft Windows Server Update Service (WSUS) and Symantec Corporate Enterprise AntiVirus Server service. She is currently working on developing rules and policies for Symantec Sygate Enterprise Protection.

Abstract

Symantec Sygate Enterprise Protection was chosen as the tool for blocking of ports and devices on networked and standalone Windows workstations in one of LANL's environments. The presentation will give an overview of the policies and rules created to meet requirements, plus detail the problems and pitfalls encountered and resolved.

10:00-10:45 AM **Enchantment Ballroom A**

Managing Your Software Environment

Mark Holtzclaw, Sandia National Laboratories

Bio

Mark Holtzclaw has been supporting Sandia for 8 years and has been working in the computer support environment for over 20 years. He is currently managing a support unit that takes care of the Facilities Organizations at Sandia and has been helping them to standardize their software environment through the use of processes he has developed.

Abstract

This presentation will cover the following topics:

- Your Software environment
- Request, Review & Approval process
- Protecting your Network & Data
- Vulnerability & Compatibility testing
- SAMS - (Quick description)
- Deployments
- Updates & Upgrades
- Licensing
- Version control
- Approved app listing
- Document control

10:00-10:45 AM **Enchantment Ballroom B**

LANDesk Process Manager for Workflow Based Desktop Configuration Managment

David Frye, Lawrence Livermore National Laboratory

Bio

David Frye is an IT Professional with 13 years of industry experience specializing in Windows Systems Management. David joined LLNL in 2001 as part of the Systems Management Solutions Group (SMSG) where he has provided technical leadership to several enterprise level services including patching, software distribution, and C&A auditing. Prior to joining LLNL, David worked as a Senior Systems Engineer for a number of large corporations including GTE, Providian Financial and ProBusiness. David holds a BA in Business Management and is a Microsoft Certified Systems Engineer. David lives in Tracy, CA with his wife Katrina and his two children Zachary age 10, and Abigail age 7.

Abstract

LLNL recently purchased LANDesk Enterprise Management Suite as a lab-wide desktop configuration management tool. One of the components of this purchase was LANDesk Process Manager (LPM). LPM promises to dramatically change how LLNL handles patch, software distribution and security configuration management by automating administrative tasks through workflow. In this talk, we will discuss the need for a new approach to desktop configuration management, the unique capabilities provided by workflow enabled tools to address this need, and specifically how LANDesk Process Manager is being implemented to provide LLNL a comprehensive severity management solution.

10:00-10:45 AM **Enchantment Ballroom C**

Social Bookmarks and Tagging in Social Networks

Hope Niblick, Sandia National Laboratories

Bio

Hope Niblick has been with Sandia for 4 years. Her educational background is in biology, but she has been working in the area of computing for 17 years. Her main area of interest is in collaboration and social computing. As a team lead in Sandia's Collaborative Application Development and Integration (CADI) department she has worked with team collaboration, instant messaging, web design and other technologies.

Abstract

Public social networking sites are all the rage now. Extensive press coverage has insured that most everyone has at least heard of the most famous example – MySpace. Other profile based sites like Facebook, Friendster and LinkedIn are also in the news. In addition to these profile-centric sites there are a wide range of sites that use various aspects of social networking technology to connect people in any number of pursuits. Flickr lets you share you photos with friends and family. Del.icio.us lets you keep track of your bookmarks while simultaneously sharing them with the world. The list of such sites is quite long and seems to increase everyday. At the same time, existing web sites are rushing to incorporate these concepts and functions.

What can organizations like National laboratories learn from the success of such sites? This seminar looks at the characteristics of social network sites with an emphasis on social and collaborative bookmarking. It will examine how these technologies work and how we may be able to leverage the ideas to increase the ability of our scientists to link to each other and share information and resources.

10:00-10:45 AM **Enchantment Ballroom D**

A User-Centric Model for Virtualization of Desktops

Matthew Gray, ClearCube (NLIT Summit Sponsor)

Bio

Matthew Gray heads up the Professional Services arm of ClearCube Technology's Engineering arm. In this role, he has assisted in advancing the model of centralized desktop computing, focusing particularly on the security requirements of Federal agencies such as the Department of Energy. During his time at ClearCube, Matthew has worked with several groups within the Department of Energy on ensuring the 0CREM initiative is considered in all aspects of ClearCube's product design. This understanding has gone in to a variety of products that have been released across the customer based, including Los Alamos National Labs.

Prior to joining ClearCube in 2002, Matthew managed the Global Server Operations for frogdesign, as well as heading up the Global Desktop Support Team for then Macintosh cloner, PowerComputing. Both positions dealt specifically with remote management of systems for end user consumption, while focusing on the security of the physical and data assets.

Abstract

The past few years have seen an explosion of interest in server virtualization as a way to leverage computing power and reduce TCO for servers. Now, public and private enterprises are applying the same virtualization model to desktops. This paper presents a simple model of user classification with performance benchmarks for each to help IT managers achieve the benefits promised by virtualization without compromising the end user experience.

11:00-11:45 AM **Fiesta Rooms 1 & 2**

Network Connectivity and Healthy Traffic Flows: Isolating System Misbehaviors and Poor Responses Using a Test Methodology

Jason Bateman, Sandia National Laboratories

Bio

Dennis Bateman is a Senior Member of Technical Staff and has been supporting Sandia's networks for 23 years. He has an MBA with a Management Information Systems degree. Dennis currently specializes in Application Performance Management, APM. He takes a holistic or an end-to-end approach from the user client through the network components and on to the applications operating on servers. By measuring network traffic flow response times, Dennis can assign response times to the systems components; application, client, network and server and then drilldown to pinpoint root causes of slow downs or failures, all from a network perspective. Dennis has a strong desire to coordinate clues of poor performance and system mis-behaviors with other support departments.

Abstract

Availability is easy. Up or down. Works, does not work. But what about performance? One cannot guess, but must measure. Most will say that "it is too hard to measure" and hence may say "it is good enough", or "don't spend time or money on the existing performance", or "you are at a remote site, we told you that performance was going to be bad". Most do not know that their system performance could be better since they have never known a faster response. Performance should not be whatever it is. How can you know which group to call about an intermittent slow response anyway? Application Developer? Desktop Support? Networking? Server Admin? As an administrator of computers or networks, would you not want to know that your system has the best connection to the network? Certainly you do. Connectivity to the network has often been responsible for

many of these symptoms. The network is the center of all, so it must be the first best performer. This presentation runs through methods for measuring and viewing network indicators to validate network component performance.

11:00-11:45 AM **Fiesta Rooms 3 & 4**

Desktop Management Tools: Prism vs. SMS

Margaret Chan, Los Alamos National Laboratory

Bio

Margaret has been working at LANL for 17 years. She has a MA and a BS in computer science. Margaret is currently in the XDIV team for the desktop support. Prior to joining XDIV, Margaret was in Distributed Software Management (DSM) team. Experience relevant to topic: SMS – 5 yrs and Prism – 3 yrs.

Abstract

The purpose of this presentation is to introduce PRISM DEPLOY 7 to you for small-scale environment application by comparing PRISM to SMS.

11:00-11:45 AM **Enchantment Ballroom A**

Understanding NAC: Network Impact and Best Practices

Susan Stewart, Cisco (NLIT Summit Sponsor)

Bio

Susan Stewart has been working at Cisco as a Systems Engineer (SE) for the past 3 years. Stewart specializes in Cisco Security solutions, but as a general SE for all Cisco technologies, she supports DOE JLab, DOE BNL and DOE KAPL, as well as some of the NASA Agencies. Prior to joining Cisco, Stewart was a Systems Engineer at IBM. Stewarts has a B.S. in Electrical Engineering and an M.S. in Computer Network Engineering, both from North Carolina State University. Stewart currently holds certifications for CCNP, CCSP, and CISSP.

Abstract

In today's emerging IT security threat environment, perimeter defense alone and traditional security products working independently are no longer sufficient. Organizations need more comprehensive, pervasive, and tightly integrated information security solutions to stay ahead of the bad guys. Federal agencies have made progress in network admission control (NAC) by implementing solutions for identification verification, endpoint security, and network foundation security. Notably, agencies are in the process of implementing Personal Identification Verification (PIV) cards that comply with FIPS 201, and nearly all PCs and laptops are installed with antivirus software. Despite this progress, today's approaches to network access control leave agency networks vulnerable to infection and insider threat. For example, PIV cards authorize users—but not their devices. Therefore, authorized employees can access the network even if they are using a laptop that is infected, lacks required software or patches, or otherwise does not comply with the agency security policy. Similarly, antivirus software mitigates the threat of viruses, spy ware, and other malicious software, but it does not check a device for compliance with security policies intended to protect the device and agency network from future attack. Agency security policies can stipulate the presence of required software, absence of unauthorized software, mis-configuration, software defects, and user account issues such as null

passwords. Agencies can use network infrastructure to enforce security policy compliance on all devices seeking to access network computing resources. Technology makes it possible for network administrators to authenticate, authorize, evaluate, and remediate wired, wireless, and remote users and their machines prior to network access. It is possible to identify whether networked devices such as laptops, IP phones, or game consoles are compliant with an agency's network's security policies and repair any vulnerabilities before permitting access to a network. By applying the best-available technologies and products, implementing a well-designed architecture and infrastructure, and deploying a multilayered security defense, organizations can implement a robust security posture. Benefits include minimized network outages, enforcement of security policies and significant cost savings with automated device repairs and updates. Certain products and solutions can extend NAC to all network access methods, including access through local area networks (LANs), remote-access gateways, and wireless access points. NAC represents a critical layer of defense-in-depth by ensuring that incoming devices comply with security policies. Because NAC focuses on the interaction between user, device, and network, it touches security, network, and desktop operations. As such, successful deployments are contingent not only on good technology and architecture but also on careful policy planning and organizational alignment. Susan Stewart will discuss three areas of NAC: the technology, how it fits with common security architectures, and best practices for deployment.

11:00-11:45 AM **Enchantment Ballroom B**

Software Engineering Project Management Using Trac

Mike Mikus, Los Alamos National Laboratory

Bio

Mike Mikus is the Product Manager for the LANL's (ESD) Electronic Software Distribution Project, the Laboratory's premier resource for software procurement. He joined LANL in 1991 and has since received various Laboratory and National awards in recognition of his technical contributions.

Jeff Weiss, Hewlett-Packard (NLIT Summit Sponsor)

Bio

Jeff has a BS in Computer Science and has been a software developer for 11 years—the last six in the Nuclear Weapons Complex. Jeff's contributions have resulted in several awards, including recognition by former NNSA Administrator Linton Brooks.

Jim Peirce, Hewlett-Packard (NLIT Summit Sponsor)

Bio

Jim has been a software developer for 17 years working in the insurance, banking and telecommunications industries, and now in the nuclear weapons industry. He was a small business owner during the 1990's and sold out before the big crash of 2000. He is a certified Project Manager Professional and Microsoft Certified Systems Engineer.

Abstract

LANL's Electronic Software Distribution system (ESD) is an established enterprise project consisting of dozens of servers, more than ninety thousand lines of code written in many different programming languages, and nearly one million records.

As the resources of ESD have changed, configuration management has become a necessity. Configuration management of the legacy system has allowed ESD to stabilize systems so that ESD can proceed with a major reengineering effort. To facilitate change control, prioritization and version control, the ESD team is utilizing Trac, an open source, Web-based project management and bug-tracking tool and Subversion, an open source versioning system.

Trac provides support for wiki markup, creating links between bug reports, change-sets, tasks, files, etc. Sophisticated project management features and reporting capabilities provide a means to seamlessly track tasks and provide real-time, integrated project documentation. Additionally, the product provides an interface to the Subversion code versioning system.

This presentation will consist of a technical overview and demonstration of how LANL ESD has utilized Subversion and Trac to facilitate our large-scale software engineering projects.

11:00-11:45 AM **Enchantment Ballroom C**

HPC Knowledge Sharing Environment

Barbara Jennings, Sandia National Laboratories

Bio

Ms. Jennings has been with Sandia for 17 years. She has earned AS, BA, MBA/MIS degrees and is pursing doctoral studies in Organizational Learning and Instructional Technologies. She has diverse experience in computing which ranges from writing code for wafer yield analysis to implementing heterogeneous email at Sandia. In her most recent position, she leads the project to provide a customer support environment for Red Storm supercomputer users. Ms. Jennings has works with an energetic team of developers and current system administrators to provide tools that enable the development of a HPC Knowledge Community.

Abstract

Studies in knowledge management have shown that innovation comes out of the social context of individuals who work and learn together. Empirical data has also been presented that suggests a perceived effectiveness that individuals, groups, and organizations feel at having shared knowledge available. The quest is to understand the environment that facilitates individuals working and learning together. For the past three years I have been involved in a project to deliver customer support for high performance computing. We have created an environment that consists of tools and applications to enable collaboration, as well as gathering, sharing, and management of knowledge. In this presentation I introduce the design of the environment, detail the collaborative possibilities, and demonstrate the capabilities for knowledge sharing that we have created for the ASC HPC Community.

11:00-11:45 AM **Enchantment Ballroom D**

SyncSort: Near CDP and Disaster Recovery Solutions

Melissa Cortale, SyncSort (NLIT Summit Sponsor)

Bio

Melissa Cortale has a BS in Electrical Engineering and Mathematics from Tulane University. Melissa has been working in the Backup/Storage Industry for two years. In that time, she has been part of architecting numer-

ous Disaster Recovery Solutions for different military and civilian agencies throughout the Federal Government. Prior to that she was in the Peace Corps where she served in Ghana, West Africa for two years.

Bob Gross, SyncSort (NLIT Summit Sponsor)

Bio

Bob Gross manages the Backup Express Federal Sales Team for Syncsort Inc. specializing in Disaster Recovery and COOP solutions. Bob has a BS in Accounting from Montclair State University and came to Syncsort with over 25 years of sales and sales management experience. Bob started his career at ADP where he held sales and sales management positions for 9 years. He then spent 15 years with SunSystems as VP of Sales before coming into his current position with Syncsort.

Abstract

The Syncsort-Backup Express Presentation will cover our Near Continuous Data Protection and Disaster Recovery Solution.

As Disaster Recovery and COOP are becoming more critical requirements facing the Federal Government, more and more Federal agencies, including DOE, are putting in place their own Disaster Recovery and COOP solutions. The Syncsort presentation will attempt to answer some questions for IT Staff and leadership in regards to understanding what requirements they should be looking to fulfill in a DR Solution and what other agencies are currently implementing in the field today. More specifically, our presentation will touch on the following topics:

- Defining Disaster Recovery
- Improving and Managing towards Recovery Point Objectives and Recovery Time Objectives
- Syncsort Advanced Protection Manager- Near CDP Agents
- Block Level Incremental Backup Process vs. File Level Backups
- Near-Instant Data/Application Failover
- Bare Metal Server Recovery (BMR)
- Disaster Recovery at a Site Level
- A Better Backup / Recovery and DR/COOP Solution

We think our presentation will benefit the attendees of the NLIT summit, since many of them will be in the near future, if not already, faced with creating and implementing a recovery solution, when faced in the unlikely event of a Disaster.